## **OAH060- CRITICAL THINKING**

Credit Hours: 3 Semester Hours

Pre-Requisite: None

Related TAG: Philosophy

**General Course Description:** This course of study stresses the understanding of critical thinking with an emphasis on argument and reasoning. Students are prepared to succeed in critical thinking environments upon completion of this course.

All essential learning outcomes must be met and will be notes with an asterisk (\*); at least seventy percent of the topics under each learning outcome must be met.

**Learning outcomes 1.** Distinguish arguments from non-arguments. \*

**Learning outcomes 2.** Identify the premises and conclusions of arguments. \*

**Learning outcome 3.** Distinguish deductive and inductive reasoning. \*

**Learning outcome 4.** Separately evaluate the acceptability of the premises and the reasoning of arguments. \*

**Learning outcome 5.** Clarify and disambiguate claims and arguments. \*

Learning outcome 6. Identify common informal fallacies. \*

**Learning outcome 7.** Analyze causal, statistical, or scientific reasoning.

**Learning outcome 8.** Analyze legal or moral reasoning.

## **OAH061- INTRODUCTION TO LOGIC**

**Credit Hours:** 3 Semester Hours

Pre-Requisite: None

Related TAG: Philosophy

**General Course Description:** This course of study stresses the understanding of introductory logic with an emphasis on sentential and propositional logic. Students are prepared to succeed in logical environments upon completion of this course.

All essential learning outcomes must be met and will be notes with an asterisk (\*); at least seventy percent of the topics under each learning outcome must be met.

**Learning outcomes 1.** Students will symbolically formalize statements and arguments. \*

**Learning outcomes 2.** Students will identify arguments and their premises and conclusions.

**Learning outcome 3.** Students will distinguish between deductive and inductive reasoning.

**Learning outcome 4.** Students will gain familiarity with and apply logical concepts including equivalency, contradiction, consistency, validity, and soundness.

**Learning outcome 5.** Students will use Venn diagrams to evaluate arguments in categorical logic.

**Learning outcome 6.** Students will use truth tables to evaluate statements and arguments in sentential/propositional logic. \*

Learning outcome 7. Students will construct proofs in sentential/propositional logic. \*

**Learning outcome 8.** Students will construct proofs in predicate logic.